

What is claimed is:

1. A digital camera comprising a means for saving an additional digital image in a storage space containing a stored digital image that has insufficient space for the additional digital image, wherein the means reduces the size of the stored digital image by resetting one or both of the resolution and the compression ratio of the stored digital image.

2. The digital camera of claim 1, wherein the means comprises an image signal processor which compares the size of storage space remaining in the storage space with the size required for saving the additional digital image.

3. The digital camera of claim 2, wherein the image signal processor automatically changes one or both of the resolution and compression ratio of the stored digital image when the size required for saving the additional digital image is larger than the size of the storage space remaining in the storage space.

4. The digital camera of claim 3, wherein the image signal processor processes a signal containing digital image information.

5. The digital camera of claim 4, wherein the image signal processor sends the signal to a storage device which stores the digital image information.

6. The digital camera of claim 1, wherein the digital camera further comprises a setting device that allows a user to set the resolution and compression ratio for the signal processed by the image signal processor.

7. The digital camera of claim 1, wherein the means comprises a control device that determines the amount of available memory in a storage space, calculates the amount of memory required for a single image at the current resolution and compression, and changes one or both of the resolution and

compression ratio settings when memory available in the storage space is less than the amount of memory required to store an image.

5           8.       The digital camera of claim 1, further comprising a display means that displays information about the number of remaining images that can be stored on the storage means and resolution and compression ratio of the images saved on the storage means.

10           9.       The digital camera of claim 2, wherein the image signal processor comprises a digital signal processor.

          10.       The digital camera of claim 7, wherein the control device comprises a micro-controller.

15           11.       A digital camera comprising  
          (a)       an imaging means that takes a picture of a subject's image and generates an image signal,  
          (b)       an image signal processing means that performs predetermined conversion and compression processes on the image signal and generates digital  
20           image information,  
          (c)       a storage means that stores the digital image information,  
          (d)       a setting means that allows a user to set the resolution and compression ratio at which the image signal is processed by the image signal processing means, and  
25           (e)       a control means that sends the resolution and compression ratio set by the setting means to the image signal processing means,  
          wherein the image signal processing means changes one or both of the resolution and the compression ratio when the storage means has an insufficient space to store new images.

12. The digital camera of claim 11, wherein the image signal processing means changes the compression ratio when the storage means has an insufficient space to store new images.

5 13. The digital camera of claim 11, wherein the image signal processing means changes the resolution and the compression ratio when the storage means has an insufficient space to store new images.

10 14. The digital camera of claim 1, further comprising a display means that displays information about the number of remaining images that can be stored on the storage means and resolution and compression ratio of the images saved on the storage means.

15 15. The digital camera of claim 14, wherein the display means is a display device that shows information about the image.

16. A method for saving images in a digital camera comprising the steps of:

20 (a) checking whether a free space for storing images remains on the storage means;

(b) checking a space required for storing one image at current resolution and compression ratio;

(c) comparing the size of the remaining storage space with that of the required storage space;

25 (d) entering a standby mode so that the images can be taken at the current resolution and compression ratio if the remaining storage space is larger than the required storage space;

30 (e) determining whether a new resolution and compression ratio is available at which an additional image can be stored on the remaining space if the required storage space is larger than the remaining storage space;

(f) determining and resetting the new resolution and compression ratio;  
and

(g) entering a standby mode so that the additional image can be taken  
after automatically changing the current resolution and compression ratio to the  
5 new ones.

17. The method of claim 16, further comprising the step of displaying the  
number of remaining images that can be stored on the storage means as well as  
information about the resolution and compression ratio of the images stored on the  
10 storage means.

18. The method of claim 16, wherein in the resetting step, the new  
resolution and the compression ratio are the highest possible resolution and the  
lowest possible compression ratio to the extent that an additional image can be  
15 saved on the remaining storage space.